ABSTRACT

Computer systems may loose data when a failure occurs within a system. To counteract such loss of data a backup system may be employed. Common backup systems make a copy of either of the data on a storage device or the data, which has changed, on a storage device. The process of backing up data may involve storing a relatively large amount of data and so is commonly done infrequently, such as once per day. If a computer's data is backed up only once per day, several hours of data may be lost if a computer system fails. Embodiments of the present invention may be used to prevent this type of data loss by backing up more frequently. In order to back up more frequently less data at a time is backed up. Instead of the data undergoing a wholesale backup infrequently, embodiments of the present invention form a timed log of the storage writes performed by the computer system. The log provides a running picture of activity to the computer storage system. By preserving the log, for example storing it at a remote site through a network connection, the state of the computer can be recreated with any desired granularity, by using the log entries to recreate the state of the data within the computer system at any desired time.